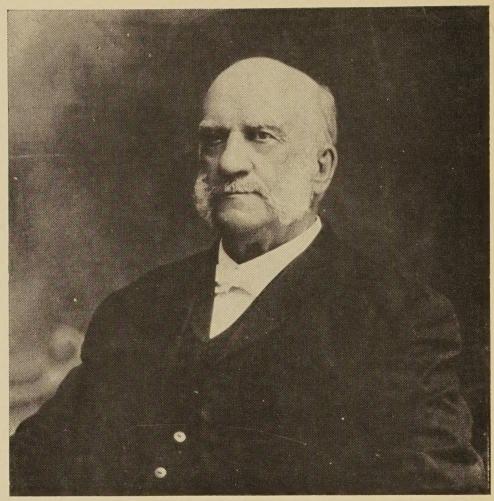
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AGRICULTURAL EXTENSION WORK

A BRIEF HISTORY





Seaman A. Knapp, Founder and Demonstration Pioneer

Published By THE NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE

North Carolina State College of Agriculture and Engineering of the University of North Carolina and the U. S. Department of Agriculture, Cooperating. State College Station, Raleigh, N. C., D. S. Weaver, Director. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.

AGRICULTURAL EXTENSION WORK

A BRIEF HISTORY

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EARLY HISTORY

"Ever since the curse fell upon our progenitor, Adam, tilling of the soil has been the chief occupation of every nation whose name is worth remembering; the more civilized it was, the more farmers it had. Every one of the long line of agriculturists, from Adam down, has felt in his heart at times the need of certain kinds of knowledge intimately related to his work which would help him materially did 'he only possess it.

"The farm which has sent forth so many thinking men into all walks of life—men great in military science, literature, the legislative hall, the pulpit—could not fail to furnish men also who in their native born profession—agriculture—thought over and wondered at the marvelous forces of organic life as shown in seed, in bud, and in flower, whose growth we can nevertheless so strangely modify and influence to suit our

"No calling in life deals with mightier forces nor contends with a greater multitude of inscrutable powers."

The above quotation from the first annual report of the North Carolina Agricultural Experiment Station, published in 1879, sets forth the problem confronting those engaged in the occupation of farming. Without ever increasing knowledge intimately related to agriculture, the progress of humanity

would be doomed to failure and the populations of the world would ultimately starve to death.

The job of Extension workers is to aid the farmer to apply that kind of knowledge which will help him to succeed. The term Agricultural Extension Work is of recent origin, but some of the tools and techniques used in Extension are as old as recorded history.

Humanity may be likened to an old Greek God, Sisyphus. Sisyphus transgressed some of the laws of the Gods and was sentenced to forever roll a stone uphill. If he did not continue to push the stone upward, it would roll down and crush him. Man was sentenced to roll back ignorance or starve.

Half of the world population now has an inadequate diet because of the ignorance of the laws of nature. Only in those countries where the organized knowledge developed through research has been applied to agricultural production and distribution are the people adequately fed and clothed. Humanity is engaged in Sisyphean labor to acquire new knowledge and to apply the benefits of that knowledge to the problems confronting agriculture.

Progress of primitive man was extremely slow, based primarily on the experience of the individual and later group experience. Still later the development of the various sciences aided very materially.

However, science as we know it today is of recent origin. The basis for the use of commercial fertilizer was not developed until about 100 years ago. Mendel's law of heredity, although discovered about 1875, did not become generally known among the scientists until 50 years ago. Similarly many other basic principals have been brought to light within the last generation.

FOREFATHERS BROUGHT SKILLS

Our forefathers brought many skills from Europe—they raised crops, livestock, made furniture, tools, soap, spun, wove, tailored, tanned, milled, baked, etc. They knew many hows but little of the whys. They cleared new land, wore it out and moved on to new fields until in recent times comparatively little new land remains to be cleared. The leaders of that time realized the need of new knowledge and made every effort to find information wherever available. Transportation and communication were slow and uncertain, and this made it exceedingly difficult to spread useful and practical information to the people as a whole.

The leaders of our colonial period, practically all of whom were engaged in agriculture, kept up constant correspondence with other colonists and also with friends in Europe. They communicated to each other the benefits of their own observations and experiences, but found that inadequate to solve the problems at hand.

As a further means of help, they organized themselves into agricultural societies. The first of these was in Philadelphia in 1785. This was followed by one in Charleston, S. C. later in the year. Meetings of these societies for the purpose of discussing agricultural problems proved quite beneficial and during the next few years many similar organizations were formed throughout the colonies.

Agricultural papers were few and limited in circulation. Even by 1850 there were only 36 agricultural papers and 11 of these were in New York state. Real development of the agricultural press did not materialize until many years later when transportation permitted wide and rapid circulation.

The forerunner of our livestock shows and expositions began in 1807. Elkanah Watson tied two imported Marino sheep under an elm tree on the public square in Pittsfield, Massachusetts. These attracted so much attention that he followed up the idea with other livestock and thus laid the foundation for county, state and national fairs. There had been shows and expositions in Europe prior to that time, but their objective was the sale of the commodities with practically no emphasis on the educational value. The first showing of women's handiwork was at one of the Watson promoted fairs in 1813.

THE COLONIAL PERIOD

During the Colonial period there were no schools or colleges to train people for the farming profession. The educational system was patterned after those in Europe which were designed for training for the ministry, law and medicine. Less than 10 per cent of the population was engaged in those while 90 per cent was left without any organized educational training, even in the primary grades. Our system of public schools did not develop until about 100 years ago.

With the development of democracy, however, came an increased demand for the education of the masses for better living. The old institutions resisted such development. They did not believe it was necessary or profitable to simultaneously train the head and the hand. However, in 1785 Congress passed an ordinance that established a precedent that 100 years later materially affected the whole future of education in this country.

At that time, 1785, the disposition of the vast areas of land west of the Alleghanies became a national problem and the ordinance passed by Congress reserved Section 16 in each township for the maintenance of public schools. That act established the precedent which led to the establishment of the Land Grant Colleges in 1862, the Agricultural Experiment Station in 1887, and the Smith-Lever Agricultural Extension Act of 1914.

DEMAND FOR EDUCATION

As the demand for educational training for the masses increased, the colleges gradually offered classes in the natural sciences and in manual training. This was true in many of the church denominational schools and in many instances new schools and institutions were established to teach manual training. Practically failed because of the lack of financial support, and from opposition and a condescending attitude on the part of the classical profession. It should also be pointed out that text books dealing with agriculture were few and far between. Agricultural science as we now recognize it had not at that time been developed. Such few textbooks as were used dealt primarily with the natural sciences such as botany and geology.

Political and civic leaders, however, did recognize the importance of agriculture in the life of the Nation, and in 1839 Congress made its first appropriation of \$1,000 for promoting agriculture. This appropriation was made to the Patent Office for the purpose of distributing information and seeds to farmers. This was the beginning and led finally to the establishment of a Department of Agriculture by the Act of Congress in 1862.

During the period from 1830 to 1860, leaders in a number of states advocated the establishment of agricultural colleges. Iowa, Maryland, Michigan and New York provided institutions of this kind prior to 1860.

In most of the states, however, the demand was not strong enough to get the necessary appropriations from state funds.

In 1780, Congress passed a resolution directing that the western territory should be disposed of for the benefit of all. This resolution was followed by the ordinance of 1785, reserving certain sections of land for the maintenance of public schools. In the disposal of the public domain, the Federal Government was receiving a large income.

It seems perfectly logical, therefore, that those advocating agricultural and industrial education should turn to the sale of the public domain as a source of funds for the establishment and maintenance of agricultural and mechanical colleges. The Congress had appropriated lands for the benefit of other educational and eleemosynary institutions, thus further establishing the precedent for the use of such funds for agricultural education.

THE MORRILL ACT

Justin S. Morrill was born in Vermont in 1810. He was the son of a blacksmith and farmer and attended school in the traditional one-room, red school house. He had two terms in academies, corresponding to our present high school. However, he left school to become a clerk in a mercantile business, where he received a salary of \$45 for the first year and \$75 for the second. Later he became a partner with a friend in the operation of a store. His business prospered and finally he bought a farm and retired from business to manage the

In 1844 Morrill became interested in politics and was elected to Congress in 1856. During his first year he introduced a resolution directing the Agricultural Committee to investigate the expediency of establishing agricultural schools similar to those at West Point and the Naval Academy. Congressman Keitt of South Carolina objected to the resolution and under the rules of the House at that time, this killed the bill.

FIRST BILL

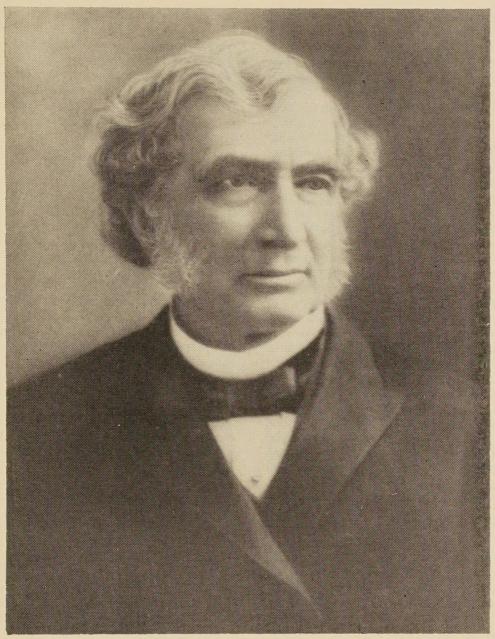
Next year, in 1857, he introduced his first Land-Grant Bill which contained most of the essential features of the later bills. Under this bill each state was to receive 30,000 acres of public lands for each senator and congressman representing that state. In most of the eastern states there was not sufficient public land to comply with the requirements. Accordingly his bill provided that in lieu of land within the state, the Government would issue land script which was to be sold to private individuals and these in turn could make entry in the western states where there were immense areas of public domain.

He further provided that any funds acquired from the sale of land or land script should be invested in securities and the income serve as a perpetual endowment for the establishment of one or more colleges in each state where subjects related to agriculture and mechanical arts would be given equal recognition and prominence with classical studies.

He expressed his objectives as follows: "Let us have such colleges as may rightfully claim the authority of teachers to announce facts and fix laws and scatter broadcast that knowledge which will prove useful in building up a great Nation."

Morrill's bill was opposed by nearly all Southern representatives as being unconstitutional. At that time, four years prior to the Civil War, the question of States' Rights and Federal Domination was the outstanding issue in the political field. The same kind of argument is being advanced at the present time regarding issues of our day. It is not surprising, therefore, that most Southern representatives looked with suspicion on Morrill's proposal.

Morrill's bill was referred to the Committee on Public Lands and after four months of consideration was given an unfavorable report by Chairman Cobb of Alabama. However, a minority report was submitted by Congressman Walbridge of Michigan and on motion to postpone consideration of the bill, Morrill had an opportunity to make a speech. He pointed out that the "power of Congress to dispose of the public lands is plain, absolute, and unlimited." He offset the argument of unconstitutionality pointing out that a way had been found under the constitution to promote and protect commerce through a tariff, immense land grants had been made to the railroads, literary labor was protected through a copyright, and inventions were encouraged through pat-



Justin S. Morrill, Father of Land-Grant Colleges

ents. Army and Navy officers were educated at the Federal academies, but encouragement to agriculture was withheld. In 1827, Kentucky was granted lands for the establishment of a deaf and dumb asylum. That bill was supported by Buchanan and Polk—then members of the House of Representatives.

After much parliamentary maneuvering, Morrill's bill finally

passed the House by a vote of 105 to 100, and later in the Senate by a vote of 25 to 22. However, when the bill reached the White House it was vetoed by President Buchanan who had supported the bill for the establishment of the deaf and dumb asylum in Kentucky. The President argued that the bill was extravagant and would deplete the treasury. It was impolitic in that it

would encourage states to rely on the Federal Government for aid to which they were not entitled. It would be injurious to new states by forcing down the price of land. It was insufficient because the Federal Government had no power to force compliance. It was unjust because it would injure the established institutions, and finally it was unconstitutional because there was no grant of power to the Federal Government to expend public money for the benefit of the people in various states. The President's veto killed the bill at that time.

For a number of years, prior to this period, a Mr. Turner of Illinois had advocated the establishment of an industrial university. He advocated the sale of public lands to get the necessary financial support. He continued his efforts after the Presidential veto of the Morrill bill and during the campaign between Lincoln and Douglass he secured the promise of both candidates that if elected they would sign the Morrill bill. Lincoln was elected President and the South seceded. This completely changed the complexion of Congress with the Republicans coming into power.

SIGNED BY LINCOLN

In December, 1861, Morrill reintroduced his bill in the House. It was referred to the Committee on Public Lands which again gave an unfavorable report. However, Senator Wade of Ohio introduced the bill in the Senate in May 1862 and his bill passed the Senate 32 to 7. When the bill reached the House, Morrill succeeded in getting a vote on the bill without having it referred to a committee and it passed 90 to 25. President Lincoln signed the bill and this led to the establishment of a Land-Grant College in every state of the Union.

There were a number of provisions in the Morrill bill that had to be complied with by the respective states. Each state had to accept the provisions of the bill within two

years. Southern states being in rebellion were not eligible. Subsequent amendments extended the period of acceptance so that finally all states complied. Under Morrill's bill the state could establish one or more institutions and these could be new or part of established institutions.

SCHOOLS OF SCIENCE

Morrill stated that the bill was broad enough so that states could use it to the best advantage. He did not intend that they be just agricultural schools. He wanted schools of science but of college grade. He did not object to their being part of a classical college provided the sciences were given prominence.

Iowa was the first state to accept the provisions of the act. Others in the North followed rapidly but it was not until after the ending of the Civil War that the Southern

states became eligible.

The disposition of the land and script varied widely and scarcely a state complied strictly with the provisions of the bill. Some held the land for higher prices while most sold within a year or more at 50 cents to \$1.00 per acre. North Carolina, South Carolina, and Illinois lost all of their investments and later these states had to replace these losses. Altogether, by 1923, some 10,928,295 acres of public land were received by the states and the total received from such sales amounted to \$17,416,000.

North Carolina had two senators and seven representatives, and not having sufficient public lands within its borders received 270,000 acres of script. The Legislature of 1866 accepted the provisions of the act and secured the script which was deposited with the State Treasury. Due to the low market value of land at that time, which was 50 cents per acre, the script was held for one year. In February, 1867, the Legislature transferred the script to the University Board of Trustees at

Chapel Hill and authorized that Board to sell as they saw fit. In August, 1867, the Board contracted to sell all of the script to B. F. Lewis and Company of Detroit for 50 cents per acre. Lewis agreed to pay \$10,000 cash and the balance as he in turn disposed of the script to private individuals. At the same Board meeting where the contract was signed with Lewis, it was voted to use 10 per cent of the receipts to pay off the indebtedness of the University. This was illegal under the terms of the Morrill Act but nothing was done about it.

The reconstruction Legislature of 1868 appointed a new Board of Trustees. This new Board made an effort to void the contract with Lewis but this effort was not successful. The Board did, however, receive \$120,000 additional funds from Lewis and ordered the Treasurer of the Board to invest this money in U. S. Bonds. Eight days later a new meeting of the Board was called which rescinded the previous instructions to the Treasurer and authorized the purchase of North Carolina bonds. The Treasurer secured \$240,000 of North Carolina railroad bonds for \$120,000. Within a few months, however, these bonds were worthless and the entire investment was lost. It would be interesting to know why the Board changed its mind within eight days from the purchase of U. S. Bonds to invest in practically worthless North Carolina bonds.

The subsequent Legislature elected a new Board, including a number of members of the Board prior to 1868. The University had been closed due to lack of financial

support. Friends of the University, realizing that the State had agreed to replace any Morrill funds that might be lost in any manner, memorialized the Legislature of 1875 to authorize the issuance of a perpetual certificate of indebtedness to the University bearing interest at six per cent on \$125,000. After much parliamentary jockeying the bill finally passed the House by a majority of one. This was the first annual State appropriation to the University.

However, the act required the University to teach agriculture and engineering and to that end the Board organized a College of Agriculture and a College of Engineering. Very few students enrolled in these courses and the records fail to show that there were any graduates in agriculture during the time the University received the benefits of the Morrill Land-Grant Act.

North Carolina farm leaders, including Colonel L. L. Polk, were not satisfied with the courses offered. The University officials argued that they were complying with the law in that they were teaching subjects related to agriculture. Colonel Polk and his followers, however, wanted courses in applied science. Having determined in their own minds that they could not get such courses at Chapel Hill, they fought for the establishment of a new institution. They were successful with the Legislature of 1887 when the act was passed authorizing the establishment of an Agricultural and Mechanical College at Raleigh, and transferred to the institution the benefit of the funds received under the Morrill Land-Grant Act.

AGRICULTURAL TEACHING

Passage of the Land-Grant Act and its acceptance by the legislatures of the several states immediately brought into prominence many problems to which there were no immediate answers. What to teach and how to teach in the new institutions was almost an unknown field. Science as applied to agriculture was not as yet organized. Investigations even in Europe had directed very little attention to the problems of crop and livestock production. There were practically no textbooks and such as were available were likely academic and had to do with botany, nature study, geology and similar subjects. Chemistry and botany were just emerging as applied sciences.

Many of the early teachers came from the medical and veterinary professions. The general idea was to train the hand along with the head, but how to do this training was as yet unsolved. Practically all the new institutions required several hours per day of manual labor for which the students were sometimes paid from three to eight cents per hour; in others such labor was performed without any compensa-

tion. In 1870 the Iowa State College stated that its purpose was "to make proficients in the sciences which underlie the various branches of industry and by manual labor to produce experts in all its various applications to the operation of the garden, farm, and the workshop." The idea of work as a means of training continued until about 1900. How to teach the application of science to agriculture was the real problem—and it was solved only through trial and error by the professors of that day.

METHODS USED

Professor Roberts of Iowa describes the methods he used as follows: "I began to tell the students

what I knew about farming. It did not take me long to run short of material and then I began to consult the library. I might as well have looked for cranberries on the Rocky Mountains as for material for teaching agriculture in that library. Thus, fortunately, I was driven to take the class to the field and farm—there to study plants, animals, and tillage at first hand.

"I fell into the habit of taking the students to view good and poor farms, to see fine herds and scrub herds in the country round about, even though they had to travel in freight cars. I suppose I was the first teacher of agriculture to make use in a large way of the fields and the stables of the countryside as laboratories.

"One day, being short of lecture material, I went to the fields and gathered a great armful of the common weed pests. Handing them around to the class, I asked for the common and botanical names and the methods of eradication. This experiment provided material for a week's classroom talk and led me to place still more emphasis on the field laboratory work and walks and talks, as we called them."

The older institutions had a condescending attitude toward the new institutions. Strange as it may seem, intercollegiate athletics served as a turning point. Boating was then the leading form of athletics. Massachusetts graduated its first class in agriculture in 1871 and at that time the Aggies beat Harvard, making a new record for the threemile boat race. This gave the agricultural college standing as a real institution and shortly after the State made an appropriation of \$50,000 to pay off the institutional debts and increased the endowment to \$350,000. It was many years, however, before all the universities accepted the new institutions as being in their class.

HOME ECONOMICS

Women were admitted to the Land-Grant Colleges of the central-western states beginning in Kansas in 1865, Minnesota in 1868, Iowa in 1869, and Illinois and Michigan in 1870. In developing courses for women, particularly from the standpoint of home economics as we now know it, the institutions were confronted with the same general problem of what to teach and how to teach.

The philosophy of the classical institutions still dominated the thinking of the professors in the courses offered in Illinois in 1875. Much of the time of the students was required in classes in ancient history, medieval history, French, German, mental science, history of civilization, constitutional history, political economy, and other subjects of that kind. Chemistry, botany, physics, domestic hygiene, food and dietetics were offered as parts of the courses of study.

As with the men, the women were required to perform certain work duties for a certain number of hours per week. Some institutions found difficulty in providing work suited to women. In some instances the women worked in the greenhouses, dropped seed in the field, and performed other light physical labor for which they were paid a few cents an hour. The real development of home economics as we now recognize it began around the turn of the century.

EXPERIMENT STATIONS

Teachers and officials of the Land-Grant Colleges soon recognized the need for additional research. If they were to teach the application of science to agriculture, they must of necessity have facts on which to base their courses of study. As early as 1870 colleges began discussing means for the development of experiment stations. In the meantime, farmers in various areas of the country began agitating for

state control of the sale of commerical fertilizers. They knew there was much fraud being perpetrated and sought some means of control.

The first experiment station was established in Connecticut in 1877, and a short time later that same year, the legislature in North Carolina established an Agricultural Experiment Station as part of the activity of the State Department of Agriculture. Other states soon followed.

The first directors of the experiment stations were largely chemists and graduates of German universities. The Germans had developed agricultural experiment stations beginning about 1850, so it was logical for our newly established stations to pattern their work to a large degree after the German stations.

Stimulated by the demand from the Land-Grant Colleges for the development of research, Congress in 1887 passed what is known as the Hatch Act. Under that act each state was appropriated \$15,000 annually of Federal funds, and it was specified that this appropriation was to go to the Land-Grant Institutions for the establishment of experiment stations.

Since the amount appropriated to each state was not large even for that period, necessarily the research work was limited and as a rule consisted of carrying on tests by the trial and error method. There was very little of what we now call fundamental research. However, in 1906, Congress passed what is known as the Adams Act which appropriated \$15,000 to each of the states for the support of fundamental research. Of course, subsequently both the state and the Federal governments have from time to time increased the appropriations for the expansion of research work.

EXTENSION ACTIVITIES

From the beginning, the Land-Grant Colleges recognized that their function was much broader

than simply teaching students registered in the institution.

They knew that if the colleges were to be supported they must have the backing of farmers in general and that means must be found for disseminating to the public any facts developed by the institutions that would aid the farmers in making their operations efficient and profitable. To that end, inquiries were solicited from the farmers regarding their problems and the professors spent long hours answering such inquiries, writing out their answers in longhand. Articles dealing with various subjects were written for publication in agricultural papers and in dailies and weeklies.

Teachers accepted invitations to present such information as they might have at all kinds of meetings. There were organizations of farmers of various kinds and with the development of the Grange, Patrons of Husbandry following the Civil War, that organization served as a useful medium for discussion and dissemination of in-

formation.

FARMERS INSTITUTES

After the single-session type of meeting the next logical step was gatherings of longer duration with several sessions for presentation of views and discussions of the various problems. Meetings of this kind were called Farmers Institutes. The first ones were held at Kansas Agricultural College in 1868, Illinois in 1870, Iowa in 1871-1872, and Nebraska the following year.

These earlier institutes were held at the colleges. They were attended by leading farmers and the movement spread rapidly over the entire country. In many of the states appropriations were made specifically for the support of Farmers Instiutes. As the movement spread institutes were held at various points away from the college-in a sense, taking the college to the people rather than bringing the people to the institution. In some of the states Farmers Institutes were formally organized county by county with a number of counties joining into a district and the districts into

a statewide organization.

Officers were elected in each instance from year to year and schedules of meetings were arranged in such a way that people from the college could attend several institutes on a single trip. The Farmers Institute movement gained national recognition and for many years the U. S. Department of Agriculture employed one or more specialists in Farmers Institute work.

During this period agricultural fairs and expositions of various kinds gave an opportunity for the agricultural colleges to put on exhibits of livestock, crops, and other commodities emphasizing especially

the educational phase.

CORN SHOWS

Then, as now, many of the recommended practices were based on theory and often without basic facts to support the recommendation. An illustration of this type of activity were the many corn schools and shows about 50 years ago. A theoretical score card was made up for an ear of corn with values assigned to straightness of rows, depth of kernel, covering of the tip and butt, etc., with a total value of 100 points. Frequently valuable prizes were offered for the best single ear and the best 10 ears of corn at a show.

In some instances special corn schools of a week or more in duration were offered by the colleges where most of the time was spent in scoring corn according to the score card. This movement was of real value for it did arouse more interest in corn production and many farmers profited from the greater attention they gave to that crop.

Finally, however, some skeptics questioned the value of the corn score card. It was implied, and at times actually stated, that the ear of corn giving the highest score



would be the best source of seed corn. When some of the doubters tried it out by comparing under uniform conditions seed from low scoring ears with those having a high score it was found there was not too much correlation and gradually that type of corn show passed into history.

AGRICULTURAL TRAINS

From time to time persons appear upon the scene with real imagination and with a personality that enables them to try something new. Such a man was Professor P. G. Holden of Ames, Iowa. Early in the century Professor Holden, in cooperation with the railroads, operated a number of "seed corn gospel trains."

These trains were composed of baggage cars for preparing demon-

strational material, day coaches in which to hold meetings, and dining and sleeping cars for the professional staff. The trains operated on special schedules, making a number of stops each day to which all farmers interested in corn were invited. The idea caught the fancy of farmers and people turned out by the thousands.

During 1904-05, Holden and his staff traveled 10,000 miles in Iowa, holding 1,235 meetings, reaching more than 145,000 people. Speakers at these meetings were of the evangelistic type. They did not have too much research work to substantiate their exhortation, but the effort did result in arousing interest in better seed corn and it was the overwhelming majority of opinion in Iowa at that time that many millions of bushels of corn were added to the Iowa crop.

The idea of agricultural trains spread by 1906 to 21 states. The movement reached its peak by 1911 when 71 trains were running in 28 states with an attendance of over 995,000.

Politicians and especially congressmen found that the agricultural train was a great asset in getting them before the public. Many congressmen helped sponsor and brought pressure on the railroads for their operation of such trains. However, after 1911 this movement declined rapidly and when the Smith-Lever Act creating the Agricultural Extension Service was passed in 1914 it had a provision which prohibited the use of any of the funds in the operation of agricultural trains. It was a wonderful idea for some 10 years, but like many other activities it served its purpose and passed on.

SEAMAN A. KNAPP

When the Land-Grant Colleges were first established there was usually only one professor of agriculture. This man handled all teaching activities, cutting across all fields of subject matter. In addition, he handled correspondence with farmers and gave lectures from time to time to various groups. Gradually, however, additional members were added to the faculty and the schools subdivided into departments as the demand and financial support would permit.

There was an ever-increasing demand for help by farmers not resident at the colleges. Soon after the turn of the century a few institutions organized departments of Extension where staff members devoted their entire time to attending meetings, organizing various types of farmers institutes, holding schools, and by other means endeavoring to answer the demand from the field.

THE BOLL WEEVIL

In 1903-04, a situation developed in Texas that was to profoundly affect the methods and techniques used by the various institutions to furnish information to farmers.

In 1892, the cotton boll weevil crossed from Mexico and 10 years later had covered a large part of the cotton territory of Texas. This insect brought about the almost complete destruction of the cotton crop in many areas. The economy of the whole South revolved around cotton. When the farmers failed to produce, banks and business in general felt the effects, resulting in farming and business failures and general economic depression. Some remedy had to be found immediately to prevent a catastrophe.

Under such conditions the states called upon the Federal Government for help and Congress appropriated \$250,000 to combat the boll weevil. Half was assigned to the Bureau of Entomology, half to the

Bureau of Plant Industry. Entomology directed its efforts to finding means of killing the weevil, while Plant Industry worked along the line of producing new crops and changing the types of farm management to make farming successful under boll weevil conditions.

With the funds made available by Congress, the department rented and operated farms in various sections of Texas. New equipment was purchased and the necessary labor hired. Many of these farms made a good showing on paper, but the farmers generally failed to accept the recommendations. Human nature being what it is, the farmer's attitude was "if I had the money like the Government, I would farm too, successfully."

The situation was desperate. Fortunately, however, a new type of Extension activity was inaugurated which came to be known as the Farmers Cooperative Demonstration Work. This movement profoundly affected the whole future of agricultural education, not only in the South but throughout the nation. Originator and leader of this movement was Seaman A. Knapp, since generally recognized as the father of demonstration work.

Dr. Knapp was born in New York in 1833 and prepared for college at an academy in Vermont and graduated from Union College in New York. For some years he taught in the colleges in that area, but after being crippled by an accident which seriously impaired his health he moved to Iowa in 1866 and settled on a farm. Continued poor health compelled his leaving the farm and for several years he was superintendent of a State Blind Institute. In 1874 he again returned to the farm, raising general crops combined with livestock, principally Berkshire hogs and Shorthorn cattle. He became a member of the stock breeders' associations and

later established an agricultural paper through which he advocated a diversified agriculture. At this time he became acquainted with James Wilson, afterwards Secretary of Agriculture who was then a farmer in Iowa. In the fall of 1879, Dr. Knapp became professor of agriculture of the Iowa State College at Ames and in 1884 was elected president of the institution.

In 1886, Dr. Knapp resigned as president of the college and went to Lake Charles, La., where he had charge of the agricultural development of a large tract of land in western Louisiana. He found it very difficult to interest the native population in improved methods of agriculture and prospective buyers from the North refused to settle in the region because agricultural conditions seemed so unfavorable. To overcome this situation, he offered very favorable terms to one settler for each township on condition the settler would farm under his general direction. This plan proved so successful that thousands of Northern farmers settled in this region and even the natives undertook

better farming.

One of the main crops produced in that area was rice, and when there arose a demand for better varieties Secretary of Agriculture Wilson sent Dr. Knapp to Japan, China and the Philippines to investigate rice varieties, production and milling. With the introduction of Japanese varieties and improved practices there was a great expansion in the rice industry.

In 1903, at a mass meeting of businessmen and farmers at Tyrrell, Texas, Dr. Knapp submitted a proposition to establish a demonstration farm under the auspices of the Department of Agriculture, provided the community would select a suitable place and raise by subscription a sufficient amount to cover any losses that might be sustained by the owner and operator of the farm by reason of following the directions of the department

in the matter of planting and cultivation. His proposal was accepted and a committee of eight was formed to provide the \$1,000 as an insurance fund. Farmer Walter C. Porter volunteered his farm of 70 acres of land. In spite of boll weevil damage Porter estimated at the end of the year that he received a profit of \$700 more than he probably would have made if he had followed his old practices.

DEMONSTRATION SUCCESS

The success of the Porter demonstration attracted wide attention and there was immediately a strong demand for similar demonstrations throughout the State. In the fall of 1903 the Secretary of Agriculture and the Chief of the Bureau of Plant Industry visited that region and personally looked over the demonstration at the Porter farm. On their recommendation Congress promptly made the emergency appropriation of \$250,000 to combat the boll weevil. In the Bureau of Plant Industry \$40,000 was assigned to Dr. Knapp to determine what could be done by "bringing home to the farmer on his own farm information which would enable him to grow cotton despite the presence of the weevil.

Dr. Knapp established headquarters at Houston, Texas, in January, 1904, and took counsel with farmers, bankers, merchants, railroad presidents and other businessmen. Contributions of money, railroad passes and other aids were received, and on February 19, 1904, W. D. Bentley was appointed as an agent to work along the lines of the Fort Worth and Denver Railroad. Meetings were held in towns along the route, and farmers were enlisted to undertake demonstrations.

At first most farmers were unwilling to undertake the demonstrations, but after Bentley joined the Farmers Union, which was the principal farmers' organization in the area at that time, he had better success. Other agents were appoint-

ed as rapidly as satisfactory people could be found and during 1904 the number increased to 20 in Texas, three in Louisiana and one in Arkansas. During that year over 1,000 meetings were held and 7,000 farmers agreed to demonstrate. In 1905 the work was expanded to include Oklahoma and Mississippi.

Since the automobile had not at that time come into general use, agents worked in 10 to 20 counties along the railroad line. They listed representative farmers and obtained their cooperation as demonstrators. Farmers were furnished with working plans and instructed in keeping records and making weekly reports. Each demonstrator was expected to grow from five to 20 acres of cotton under the direction of the agent who visited him at least once a month. Field meetings were held and all farmers were invited to become cooperators by carrying out recommended practices, but cooperators did not have the monthly visits from the agents.

The funds appropriated by Congress to combat the ravage of the boll weevil were limited to expenditures within the infested area. However, the success of the Knapp demonstrations gained wide publicity and there was an ever-growing demand for similar work in the areas surrounding the weevil infestation. Farmers and businessmen knew the weevil spread from 50 to 150 miles per year, and called for assistance. Such assistance was made

possible in 1906.

In 1902, John D. Rockefeller had established the General Education Board and endowed it with millions of dollars "for the promotion of education within the United States of America without distinction of race, sex or creed." The Board was given power to establish schools of any grade or description, to cooperate with associations in collecting and publishing statistics and other information, and any other means of public education. The general policy of the General Edu-

cation Board for its work in the South was to cooperate with the leaders there and not to interefere with their enterprises. Wallace Buttrick, secretary of the Board, visited many colleges and universities in the United States and Canada.

It so happened that his visit to the Texas College occurred when Professor Knapp was lecturing there, and Buttrick was favorably impressed with Dr. Knapp's plan of demonstration work. He arranged for a conference with Dr. Knapp and Secretary Wilson in Washington. It was Dr. Knapp's opinion that if demonstration work could be started in a state, county or community with outside funds it would soon get local support and would spread with the ultimate result that the "teaching of agriculture and domestic arts would become an accepted feature of rural education."

The General Education Board decided to supplement Federal appropriations so the work could be started in the area not infested with the boll weevil. To that end, it signed an agreement with the Secretary of Agriculture which provided that "the farmers' coopera-tive work in which the General Education Board is to become interested shall be entirely distinct in territory and finance from that carried on solely by the Department of Agriculture." It also provided that "the United States Department of Agriculture shall have supervision of the work and shall appoint all special agents of this extended territory in the same way that they are now appointed, that the said agents shall be under the control of the said department in every respect as fully as any of the agents of the department." The agents were paid a salary by the General Education Board and each was given an official commission from the Department of Agriculture at a salary of \$1.00 per year. This gave them official status and enabled them to use the franking privilege for official business.

FIRST N. C. DEMONSTRATION

The first county agent in the United States was W. C. Stallings, appointed on November 12, 1906 to serve in Smith County, Texas. His appointment resulted from a local demand for more demonstrations and more information than could be given by agents whose territory included several counties. In Louisiana and Texas the ravages of the boll weevil were so severe that businessmen came forward with proposals to pay a large share of expenses involved in employing agents to give their whole time to a single county. They offered from \$750 to \$1,000 to obtain an agent.

KNAPP'S IDEAS

Dr. Knapp recognized the advantages of having one man serve a smaller territory. In his report to the Department in 1908 he set forth his ideas as follows: "A few demonstration farms scattered throughout the county-say five or six as would be the case where one agent had charge of seven or eight counties—do not create sufficient public sentiment and moral force to change the long established usages of the masses. There must be at least five or six demonstration farms and quite a number of cooperators in each township so that practically we would reach every neighborhood-arouse interest and competition everywhere and arouse the whole community. To do this requires at least one agent in each county."

The idea of a county agent for a single county developed rapidly and as the work expanded into the southeastern states the appointment of agents by counties became the rule rather than the exception.

As the appropriation from the General Education Board increased, Dr. Knapp took in additional territory and in the fall of 1907 sent C. R. Hudson, a graduate of the Agricultural College in Alabama to

North Carolina to initiate the work. Hudson first came to Raleigh with the intention of making that city his headquarters. He arranged for a demonstration on the farm of W. W. Smith, just east of Raleigh, but he reported that the attitude of the people at the Department of Agriculture was so cold that he moved his headquarters to Statesville, where the first agent was appointed in November 1907.

A meeting was held at Statesville on November 18, 1907, and according to the best information available, James A. Butler was appointed as the first county agent in North Carolina and began his new duties as of that date. At any rate, on November 20, 1907, Butler arranged with J. F. Eagles of Route 1, Statesville, to be signed up as the first farmer to undertake a demonstration under the supervision of the county agent. Eagles agreed to grow 21/2 acres of corn and two acres of cotton according to the recommendations of the U.S. Department of Agriculture.

Eagles had been on his farm about five years when he signed up for the first demonstration. Some years later, he said, "It took me 15 years to get the old place started on a profitable basis; I don't think I ever would have succeeded had it not been for the use of limestone and clover. The best medicine for old worn out soils is good plowing, liberal applications of limestone, phosphoric acid and red clover."

After the work in Iredell County, agents were appointed in a short time in Rowan, Gaston, Lincoln, Union, and other counties in the Piedmont. Within a few years the work was extended to all sections of the State. Almost without exception, the first agents were not college graduates; all told, there probably were not more than 25 graduates of agricultural colleges living in North Carolina at that



C. R. Hudson

time. Hudson tried to select men who were recognized as good farmers and leaders in their respective communities. Many of them worked only a part of the year, for which they received a salary of \$75 per month.

FARMERS CONTRIBUTE

In the beginning of the work in the State it was financed entirely by appropriations from the General Education Board, but under the direct administration of Dr. Knapp. After the work had been in progress for about a year, farmers in various counties made contributions of a few hundred dollars toward the expenses of the work. Apparently, Guilford County was the first county where contributions were made by farmers.

As yet we have not found a record of the first appropriation by Boards of County Commissioners. However, in 1911 the Legislature did pass an act authorizing Boards of County Commissioners to make appropriations in cooperation with the Farmers Cooperative Demonstration Work. That act, ratified by the Legislature on January 20, 1911, is quite significant in that it is the only general law passed by the Legislature authorizing Boards of County Commissioners to make appropriations for Extension work and is as follows:

> PUBLIC LAWS OF NORTH CAROLINA—1911 CHAPTER I

An Act to authorize the County Commissioners to make appropriations to the Farm Demonstration Work
The General Assembly of North Carolina do

enact:

Section 1. That the County Commissioners of any County in North Carolina are hereby authorized and empowered, in their discretion, to cooperate with the State and National Departments of Agri-

culture to promote the farmers Cooperative Demonstration Work.
Section 2. That the County Commissioners of any county, agreeing to cooperate in said work as aforesaid, are therefore authorized to appropriate such sums as may be agreed upon for said

purpose.
Section 3. This act shall be in force from and after its ratification.
Ratified this twentieth day of January,

A. D. 1911.

There have been acts passed since that time dealing with special problems in certain counties.

Although very few of the agents of that day were college trained, to some degree, however, they overcame that handicap by their faith and enthusiasm. They were called together for an annual conference at which time representatives from the Washington office would meet with them and it would sometimes appear when they were reporting on the progress being made in their respective counties that their enthusiasm sometimes exceeded their better judgment. Then as now, some of the agents were better talkers than others and the bull-sessions between meetings afforded an opportunity for tall tales to be told.

James A. Butler, the first county agent, died just after he had served three months. During that time, however, he arranged for 30 demonstrators and 200 cooperators in Iredell County. This record indicates not only enthusiasm and activity on the part of Butler, but likewise points out definitely wide interest on the part of farmers to improve their production.

Hudson continued to make his

headquarters at Statesville for a little more than two years. However, Dr. Knapp recognized the unsatisfactory situation between the Land-Grant Colleges and the Department of Agriculture and during the winter of 1908 and 1909 discussed with a number of southern college presidents the desirability of a coordinated program. These discussions led to the signing of Memoranda of Understanding between the Bureau of Plant Industry and a number of the colleges. North Carolina holds the honor of signing the first of these agreements. memorandum was signed sometime during the spring of 1909 but became effective on July 1, 1909. This agreement is of historic importance since it was the first agreement of its kind between a Land-Grant College and the Department of Agriculture. While it specifically provided for the Department and the colleges jointly to sponsor "Farmers' Boys Clubs," it was broad enough to cover general activities such as later became known as the Extension work.

That historic agreement was as follows:

MEMORANDUM OF UNDERSTANDING BETWEEN THE BUREAU OF PLANT INDUSTRY, UNITED STATES DEPARTMENT OF AGRICULTURE, AND THE AGRICULTURE AND MECHANICAL COLLEGE OF THE STATE OF NORTH CAROLINA, RELATIVE TO COOPERATIVE DEMONSTRATION WORK IN THE STATE OF NORTH CAROLINA.

(To take effect July 1, 1909)
The object of this cooperative work shall be to improve and aid agriculture in the State of North Carolina by aiding, encouraging, and extending practical farm demonstrations throughout the State.

For the purpose of carrying on this cooperative work, it is agreed:

(1) That the Bureau of Plant Industry of the United States Department of Agriculture and the Agricultural and Mechanical College of North Carolina shall select an

College of North Carolina shall select an expert to conduct the work in accordance with plans mutually agreed upon from time

(2) That the Bureau of Plant Industry, subject to the approval of the Secretary of subject to the approval of the Secretary of Agriculture, shall pay the salary and necessary traveling expenses of the expert, from funds appropriated for Farmers' Cooperative Demonstrations for the fiscal year from July 1, 1909, to and including June 30, 1910; and that for each succeeding year during the life of this agreement a sum, to be determined by mutual agreement and contingent on appropriations by

ment and contingent on appropriations by Congress for such work, shall be paid.
(3) That the work to be performed by and for the United States Department of Agriculture under this agreement shall consist in planning and conducting farm demonstrations on school or other farms and among organized clubs of farmers' boys on such farms as may be mutually agreed upon by the parties entering into this understanding. this understanding.

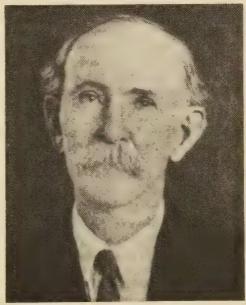
(4) That both parties to this understanding shall be free to use the results obtained from the demonstration work in official from the demonstration work in official correspondence and publications; in cases of publication, the cooperative nature of the work is to be plainly indicated.

(signed) G. H. Powell,
Chief, Bureau of Plant Industry,
United States Department of Agriculture.

(signed) D. H. Hill,
President, North Carolina Agricultural and Mechanical College.

It was under this agreement that the writer began work as Boys Corn Club Agent in North Carolina. I was not the first agent in the South for in one or two instances other states appointed agents at State expense, but I was the first agent to actually begin the work under the joint agreement.

While it was not specified in the Memorandum of Understanding, it was agreed by the college and the Department that Hudson would, as soon as it could be arranged, move his headquarters from Statesville to an office provided by the college. In due time Hudson and I occupied a joint office in Patterson Hall.



J. F. Eagles

4-H CLUB WORK

There have been many agrarian movements or forces which have profoundly affected the life of this nation. It is impossible to evaluate these forces and determine that any one was more valuable than another. In each instance any new movement was simply a step forward from some previous activity.

Many would say that forces developed during the period 1850 to 1862 which finally resulted in the establishment of the Land-Grant Colleges in the United States was the most significant and far-reaching in the life of this nation. Others may argue that other agrarian movements have been equally as effective. I think, however, that all will agree that 4-H Club work, as we now call it, has made a cultural and economic contribution to the well being of this country that marks it as one of the most outstanding achievements, particularly in the field of agricultural educa-

With the present enrollment of nearly 2,000,000 boys and girls, it is the largest organization of youth in the world dedicated to the uplift of mankind. During its existence of nearly 50 years, several million Americans have had the benefits resulting from membership in the organization and former members of 4-H Club work are now leaders in the professions of all kinds. Perhaps the presidency of the United States is the outstanding example of a position not filled by a former 4-H Club member, but it is only a question of time before some former 4-H boy or girl holds that exalted position.

Such a movement deserves special mention in this series of Extension history and will be treated in chronological order.

HISTORY CLOUDED

Historically it is impossible to pinpoint the beginning of a movement such as club work. One may find what is apparently a beginning, but further search will lead to the discovery of some previous activity somewhere in the country that likewise made a contribution to the movement as a whole. Sometimes we think of the One Acre Corn Contest as being new, yet the records show that as early as 1856 prizes were awarded to boys who made the largest yield of corn on one acre. Undoubtedly, there were similar activities in some part of this country ante-dating the Horace Greeley Contest in New York in 1856.

For the purposes of this discussion, we can begin about 50 years ago. During the turn of the century movements started in various sections of the country which developed in a few years into a general activity which grew into the present organization.

These activities 50 years ago were in the main promoted by progressive school superintendents and were to be found in Texas, Georgia, Ohio, Iowa, Illinois, Minnesota, Nebraska, North Dakota, Kansas, Massachusetts, Indiana, and perhaps elsewhere. All were looking for means of broadening the school program beyond the mere teaching of reading, writing These various arithmetic. movements attracted local, state and national attention and the contributions made by those pioneers were really the foundation stones for the present program.

None of the movements mentioned heretofore had the sponsorship of the U. S. Department of Agriculture. Such sponsorship was not to take place until the winter of 1907. In Lexington, Holmes County, Mississippi, the County Superintendent of Schools, William H. Smith, wanted to broaden his school program. In February 1907 he called a meeting of volunteer

corn growers and their teachers. To this meeting he invited the Dean of Agriculture from the Mississippi Agricultural College and also a representative of the Farmers Cooperative Demonstration Work.

At this meeting arrangements were made for a corn growing contest and 120 boys grew corn that year. In October 82 of these boys exhibited corn at a fair. Local merchants provided ribbons and

prize money.

Without any question of doubt, it is evident that Dr. Knapp's agents of the demonstration work kept in close contact with the corn contest in Holmes County during that year and advised Dr. Knapp in Washington. As a result, Dr. Knapp took a significant and unusual step on December 11, 1907, by having superintendent Smith appointed as a collaborator of the U.S. Department of Agriculture at a salary of \$1 per year. This appointment enabled him to use the franking privilege to mail out circulars and instructions postage free. Smith thus became the first man to be federally named to do club work with rural boys and girls.

WORK SPREADS

The Holmes County work attracted a great deal of attention and by 1908 the work spread to a number of counties not only in Mississippi, but into some of the adjacent states. Some 2,000 boys took part in the corn club program in Mis-

sissippi during 1908.

In 1908 Tom Marks and others in Jacksboro, Texas promoted a successful corn growing contest. The year before Marks and others had promoted a corn show for adults. Only three exhibitors sent in corn with probably a score of spectators coming to see the show and to listen to speeches. The promoters were much disappointed and in holding a post-mortem over their failure a railroad man mentioned the success of the corn clubs in Mississippi. Another ventured



I. O. Schaub

that "you can't teach an old dog new tricks." Marks immediately responded: "Next year we'll try the

pups.''

The corn clubs attracted a great deal of attention during 1908 and by the end of that year Dr. Knapp was ready to incorporate the idea as a part of the program of the Farmers Cooperative Demonstration Work.

Interest continued to increase in the spring of 1909 and on March 5, 1909, he appointed O. B. Martin, former State Superintendent of Education in South Carolina, as a special agent in the Bureau of Plant Industry and charged him with the specific duty of developing club work.

At first Dr. Knapp had in mind handling the club activities through the school superintendents. Apparently he had some misgivings up to that time as to just how the Land-Grant Colleges might fit into the program. Certainly some of the institutions had not been too sym-

pathetic toward the farm demonstration work.

By the time of Martin's appointment, however, Dr. Knapp's attitude toward the colleges seemed to have changed. Perhaps the cooperation between the colleges and the club work in Mississippi and Louisiana had something to do with his change of attitude. Martin reports that during the winter of 1908 and 1909 Dr. Knapp discussed cooperation with several of the college presidents and then told Martin to go ahead and arrange with the Southern institutions for the appointment of state club leaders under the joint direction of the college and the Bureau of Plant Industry.

TAR HEELS FIRST

As mentioned earlier, North Carolina was the first institution to actually sign an agreement. Under that agreement I became the club agent in North Carolina. The agreement provided for the work to begin on July 1, 1909, but as a matter of fact, I began work on the first of May and until the new fiscal year was paid by the college.

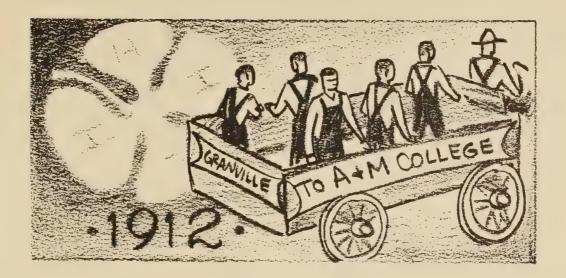
There had been club work in North Carolina for one or more years before 1909. The State Department of Agriculture had appropriated funds to be used as prizes and the work was placed under the direction of T. B. Parker, who had charge of the Farmers Institutes in the State. Parker did not have a field organized through which to work but he was successful in enrolling a considerable number of boys in corn clubs and this stimulated general interest.

Also, C. R. Hudson, the first State Agent who had initiated the demonstration work in the Piedmont area in the fall of 1907, did some type of poultry club work in Iredell County. In his report he mentioned the work but states that it was not official because it had not been included in his program. It was, however, a beginning.

With the Department of Agriculture promoting corn clubs and a similar movement on the part of the college and the Department of Agriculture at Washington, it is easy to understand that there was some confusion in the minds of the people in the State. Parker and myself, however, cooperated as far as we could in the exchange of names and other activities and after some two years the Department of Agriculture transferred its activity to the college and at the same time continued to make some appropriations for prizes. Frank Parker, who was with the State Department of Agriculture, came out to the college as my assistant.

My initial work was largely through the county school superintendents. Dr. J. Y. Joyner, State Superintendent of Education, was enthusiastic for this type of activity and invited me to all meetings of county superintendents. They in turn worked through the teachers and by 1910 I had an enrollment of nearly 4,000 boys and some girls in Corn Club work. I also met with the demonstration agents and most of them were active in promoting club work in their respective counties. I attended many meetings called by the farm demonstration agents, at which time club work was explained. In many of the counties we also had corn shows.

By the fall of 1909 Dr. Knapp had become enthusiastic about boys demonstration work. On one of his visits to Mississippi he promised a free trip to Washington to the Mississippi boy who made the best record with his corn crop. Following up that lead, O. B. Martin made a similar offer in South Carolina, and other sponsors offered trips from Virginia and Arkansas. These four boys were called to Washington at one time. They were presented to President Taft at the White House and were awarded diplomas by "Tama Jim" Wilson,



then Secretary of Agriculture. This was the beginning of the National 4-H Club Camp as we now know it.

In 1910 still more states sent boys to Washington and included in that group was Earnest Starnes of Hickory, N. C., who reported a yield of 146 bushels to the acre. The outstanding yield of that year, however, and certainly one of the largest yields ever made in the United States, was by Jerry Moore of South Carolina who reported a yield of 2283/4 bushels per acre. Jerry won many trips as prizes and he was also awarded a scholarship to Clemson College where he graduated. Later on, for a number of years, he was a member of the Experiment Station staff in plant breeding work in North Carolina.

In 1911 or '12, I attended a club meeting or show in Granville County. The suggestion was made that the club winners spend a day or two at the A & M College, as it was then called. Local people agreed to pay their expenses and some four or five boys made the trip. The boys stayed in the college infirmary. They not only visited the college but also met the Governor, the State Superintendent of Public Instruction, and saw other

places of interest. For most of them it was an outstanding experience. I remember one of the boys who came from the rural area and this was his first trip away from home—further than Oxford, the county seat. The other boys teased him quite a bit. He did not know how to turn off an electric light and one of them asked him what it was called. His answer was "lightnumtricity, ain't it."

4-H CLUB WEEK

This trip of the Granville County boys was a forerunner of our State 4-H Club Week as we now know it.

Club work in those first few years in North Carolina was confined almost entirely to the production of corn. I kept a list of all the members in the State, sent them bulletins and circular letters, and of course, had personal correspondence with many of them. Some of the boys made outstanding yields and these in particular attracted State-wide attention. As stated before much of the contact was through the County Superintendent of Schools and to a large degree, the enrollment within the county depended largely on the interest of the county superintend-

GIRLS CLUB WORK

From the beginning of the Boys Corn Club work there were some girls enrolled for that project. Obviously, however, very few if any anticipated there would ever be a large enrollment of girls in connection with field projects requiring a large amount of hard physical labor. A number of people gave thought to the development of a type of project for girls more suitable than corn. Some members of the staff in Dr. Knapp's office advocated the development of girls work along with that of boys in 1909.

It was Dr. Knapp's philosophy, however, that it was better to take one project at a time carrying it along until it received the necessary recognition on the part of the public and then take on additional activities. Apparently the Corn Club work developed more rapidly than Dr. Knapp anticipated and by the end of 1909 he was ready to sponsor activities with girls.

Dr. Knapp and members of the staff discussed various ideas with people in a number of states and out of these discussions it was decided that the girls work would be initiated on the basis of having each club member grow and can one-tenth acre of tomatoes. The tomato was selected because it was generally grown and appreciated. It was more easily canned without danger of spoilage than was true with most vegetables and it was felt that one-tenth of an acre would provide not only for the family but would produce enough for sale. The idea of having some for sale was a significant factor for at that time spending money with the average farm family was exceedingly small.

PLAN OUTLINED

During the Christmas holidays of 1909 O. B. Martin addressed the annual meeting of the State Educational Association in Columbia, S. C. He outlined the plans for a garden and canning project and pointed out specifically that it would tie schools more closely to the farm homes.

The teachers listened with interest but only one responded with Marie S. definite action. Miss Cromer from Aiken County went home and spent her Saturdays writing letters to girls trying to enlist them in the project. By spring she had 46 volunteers who were growing one-tenth acre each according to the instructions from the Department of Agriculture. During the growing season Miss Cromer, the County Superintendent of Schools, and the State Farm Demonstration Agent visited the girls. In time the tomatoes started to ripen and the next step was to get them canned.

Miss Cromer's project received wide publicity, even in the early stages, and a public spirited woman in New England financed a summer of domestic science study in New England for Miss Cromer. She left just after her school closed so arrangements had to be made to teach the club girls how to can.

AIKEN MEETING

Dr. Knapp's office had sponsored the project so that office was expected to furnish the leadership. Mr. Martin was assigned the job. He knew practically nothing about canning so he looked around for skilled help. He enlisted the services of Miss Hyde, the Home Economics Teacher at Winthrop College, and also rounded up a tinner, a plumber and a carpenter.

A meeting was called at Aiken on the courthouse square on July 16, 1910. The girls were invited to bring in their tomatoes. A rather large canning outfit was shipped from Illinois and set up on the courthouse lawn. There were long tables at which women and girls worked, blanching and peeling tomatoes. This canning school ran for three days and it was then moved to another town where the

scene was repeated.

One 14-year-old-girl who attended the session at Aiken produced on her one-tenth acre plot 512 No. 3 cans of tomatoes and her profit was estimated at \$40. This project in Aiken County aroused so much community interest that a fair was organized and capitalized at \$8,000 for the sole purpose of climaxing the annual labors of the boys and girls clubs.

Wide publicity was, of course, given to this initial endeavor, and by fall there was an insistent demand for a similar type of program in many communities and in several

states.

About the same time this work was initiated in South Carolina a similar activity was promoted in Virginia, but without the specific project of one-tenth acre of tomatoes. As a matter of fact, Miss

Ella Agnew of Virginia received an appointment from the Department as State Agent of Girls Tomato Clubs before a similar appointment was given to Miss Cromer. Miss Agnew, therefore, was the first Home Demonstration Agent ever appointed by the Department of Agriculture.

TENNESSEE AND MISSISSIPPI

Late in the year of 1910 similar agents were appointed in Tennes-

see and Mississippi.

Miss Susie Powell, first agent in Mississippi, visited Washington in the fall of 1910 and, in a conversation with Dr. Knapp, asked the question, "What does it all mean?" Dr. Knapp's reply was, "Cultivation of the tomato plant will take us into the home garden; canning the tomatoes will give us the entrance to the farm kitchen; tomatoes fresh and canned will be a valuable supplement to the family diet; the sale of the tomatoes will provide an



Forerunner of girls work was the tomato clubs. This first canning club exhibit at the 1911 N. C. State Fair was prepared by Guilford County Club.

income for the girls. What the program will do for the farm home depends on our interest, intelligence

and perserverance."

Dr. Knapp, responding to the general demand, arranged with the General Education Board of New York to finance the Canning Club program and at the board meeting on February 3, 1911 appropriated \$5,000 for that purpose. His plan provided that where county workers were appointed the board would give \$75, provided the county would appropriate a like amount. It was assumed that this would employ women agents for two summer months. The salary was low and the work hard, but part of the agents' reward was the sudden revelation of how much their work meant to some unnoticed and neglected youngsters.

It was from this General Education Board appropriation that North Carolina was given its first allotment. As I recall, we were to receive \$300 and to begin the work in two counties. I had become fairly well acquainted with the county superintendents of schools and after a conference with Dr. J. Y. Joyner, the work was offered to Guilford and Robeson counties.

GUILFORD COUNTY

For some reason Robeson County failed to develop the program. In Guilford Tom Foust, the county superintendent, became very much interested and after several conferences it was agreed that instead of starting the work in one school, it would be tried in two, but with a corresponding reduction in salary to be paid to two teachers so as to live within our total budget.

The first club was organized in March, 1911 in the Pleasant Garden School with Miss Lucille Kennett as agent. Miss Kennett did not serve the entire summer and she was succeeded by Miss Annie Lee Rankin. The club was also organized at McLeansville and, as I recall, Miss Rankin served that club

as well as the one at Pleasant Garden. Probably a short time later, Mrs. J. E. Coltrane, the teacher at Jamestown, had charge of a club in that community.

CANNING SCHOOL

The actual records of those activities do not seem to be available at this time. I do remember, however, attending a canning school at the spring back of the Rankin home at McLeansville, which was an all-day affair. No one there had had experience in trying to seal tin cans. I was assigned the job of heating the sealing iron. I could get the iron hot but it just would not give us a smooth seal. We had plenty of grief and I now wonder how many of those cans of tomatoes really kept.

By 1912 Dr. Knapp and his staff in Washington were completely sold on the possibilities, and with increased appropriations from the General Education Board, the work was expanded into other states and the appropriation in the first states

increased.

During the summer or early fall I was advised from Washington that they thought it advisable for me to find a woman to take charge of the girls canning work. Perhaps they had heard of my lack of successs in teaching people how to seal a tin can.

I began searching for a satisfactory person. I happened to be living next door to a lady with a charming personality and bubbling over with enthusiasm for any job she undertook. I approached her regarding this work. She knew scarcely anything regarding the program and naturally was somewhat cautious in making a commitment. Finally, however, she advised me that she would undertake it for a three-month period, but on condition that if I was not satisfied with her work at the end of the period, I was frankly to tell her so, and also that if she was not satisfied she was to so advise me.

That lady was Mrs. Jane S. Mc-Kimmon, who took over at that time and from then on became the outstanding leader of home demonstration work in North Carolina, and certainly during her lifetime no one in the United States exceeded her contribution. I think that the greatest contribution I have ever made to Extension work in North Carolina was gettting Mrs. McKimmon started in that work.

There were a number of counties in the work in 1912 and at the fair that fall there was a booth exhibiting the products produced by the Girls Canning Club members. Already they had progressed beyond the mere canning stage for there were exhibits of pickle, catsup, canning in glass, canning in tin, and a number of other products. Occasionally you would hear a minor explosion in the exhibit for the canning art had not yet progressed to the point, at least for home canning, where all of the products were safely processed.

STATE FAIR

There was one rather amusing incident in connection with the fair exhibit. Mrs. McKimmon was not on the payroll, but her enthusiasm was already in the work, so she stayed with the exhibit practically all the time and took great pride in telling the fair visitors all about it. One day I observed her talking with a gentleman and she was talking not only verbally but with her hands and her whole personality. The conversation lasted for some time and when the visitor had gone, I asked Mrs. McKimmon if she knew who he was. She said that she did not, but that he certainly could ask lots of questions. I had met him before and knew that it was Dr. Wallace Buttrick of the General Education Board in New York, the agency that was financing all of this work. Mrs. McKimmon was somewhat embarrassed but the incident did not dampen her enthusiasm and I am sure Dr. Buttrick left that exhibit with more confidence as to the future than we had had up to that time. He probably did not hear the bottles and jars popping from time to time.

The growing of the canning of tomatoes led almost immediately into other products. The soup mixture was one of the first, and this of course required vegetables. Very shortly some of the girls started in poultry work. All of this led to marketing, for one of the first objectives was to sell part of the product so as to increase the family income. Many problems had to be overcome. It was learned early that if you are going to sell you must have a standardized product. There were many problems, but in the long run these were solved, and the work expanded by leaps and bounds. From a very few girls in 1910, the number grew to some 4,000 in 1911, about 11,000 in 1912, and more than 20,000 by 1913 throughout the Southern states.

A Virginia agent, in one of her field reports, made a statement that exemplifies the significance of the work. It was as follows: "After all, this canning club work means that we are to get a girl to do something worthwhile, have it approved by those she loves, and then lead on to greater things."

HOME DEMONSTRATION WORK

The work with women developed "by doing just what comes natchally." The girls had started by producing one-tenth acre of tomatoes and canning those not used in the home or sold as green fruit. The mothers of the girls were, of course, interested in the success of their daughters and in most instances assisted with the canning operations.

As the girls expanded their projects to include other vegetables the interest of the mothers grew accordingly. By the end of the second or third year the mothers themselves were beginning to ask for assistance with other problems in connection with the home.

Dr. Knapp wanted to get into the farm home. He realized, however, that this could not be done through a direct approach. At the first meeting of women agents held in Washington Dr. Knapp told them not to go to the farmer's house and tell him they had come to teach his wife to cook. He told them the man of the house would knock them down, and that he would be justified in doing it out of respect to his wife—whether she was a good cook or not.

He had visualized that the garden would lead into the kitchen, from the kitchen to the rest of the home and all of its activities. That was exactly what was happening within two or three years after girls club work was started.

CASH SCARCE

At that time ready cash in most of the homes in the South was almost non-existent. The families' needs and desires were there, but the means to acquire them just couldn't be found. It was logical, therefore, that most of the projects in the early days had to do with commodities that might be sold and thus increase the family income. It was only a short distance from the

family garden to the hen house and in those early days most of the home agents became poultry specialists—just as they were recognized as gardening and canning specialists. The few dollars earned from the sale of canned goods, eggs and chickens enabled thousands of homemakers to start the long climb up the ladder to labor saving equipment and lessening of the drudgery that went along with homemaking.

THE FIRELESS COOKER

One of the first labor saving devices that gained wide popularity was the fireless cooker. Someone discovered that if you could confine heat in a small space the cooking process could continue on for hours. To most people it was unbelievable that a hot stone placed in an insulated container would cook an old rooster until it was tender.

Seeing, however, was believing, and in the course of two or three years thousands upon thousands of homemade fireless cookers were in use on Southern farms. It relieved the housewife of hours of labor over a hot stove, and for many of them it meant a hot dinner was being cooked in a fireless cooker, while the housewife labored in the field along with the husband and the children. Relatively speaking, the fireless cooker of that day represented as great an advance in the standard of living as does the automatic electric range of 1953 represent improvement over the type of equipment used just a few years ago.

From the kitchen demonstration work quickly broadened into the home, and especially as regards the making and renovation of clothing and the design and construction of ladies' hats. Home agents were soon looked upon as specialists in those fields as well as in gardening, can-

ning and general food preparation.

A little later one of the popular projects of farm women was the making of dress forms. Thousands of farm women for the first time saw themselves as others saw them. Perhaps that project aided materially in the promotion of nutrition work and certainly it brought about a large increase in the number of people following a reducing diet.

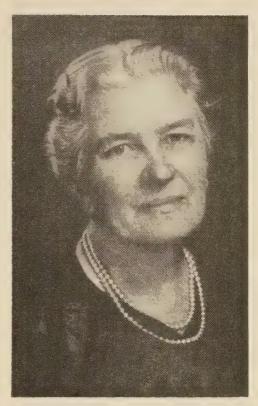
The work of the home agent in those days was hard, the pay was low, the hours long, and a horse and buggy were the means of conveyance. Scarcely any of the agents had had home economics training in the colleges. The successful agent had to have unbounded energy, imagination, ability to adapt themselves to varying conditions, and imbued with a missionary spirit.

By the time of the First World War, home demonstration work and girls club work had become firmly established in a sufficient number of counties to prove its value. Not all county commissioners, however, were sold on the idea and getting local appropriations in many counties was no easy task.

FOOD FOR WAR

When the United States was drawn into the First World War, Congress made large appropriations for emergency work. It was soon recognized that food was just as important as bullets in winning a war. Consequently, millions of dollars were allocated to the states to increase the number of Extension workers in all fields. There were sufficient funds to put new home agents in practically all counties in the State, whether there was any local contribution or not. The production and conservation of food became the main function and the response on the part of the people was all that could be expected.

Then, as now, Extension workers had to be ready for any emergency. As the influenza epidemic of 1918



Mrs. Jane S. McKimmon

spread into all communities there was a shortage of doctors, nurses, dieticians, hospitals, and other facilities necessary to take care of the sick. The home agents in particular were drawn into the fight. They helped to organize groups for every kind of help and in many instances served as nurses, dieticians, and any other way they were needed. It was a day and night call and they met the challenge beyond question. Some gave their lives because the physical and nervous strain reduced their own natural resistance and they themselves contracted this disease.

Following the war emergency appropriations were withdrawn. For a while this naturally resulted in a decrease in the number of agents. The work they had done during the emergency, however, had shown many farm women the value of home demonstration work and these people kept the spirit alive in all the counties where there had been

agents. They would appear before Boards of County Commissioners and ask for the re-establishment of the work. There were increased Federal and State appropriations and the number of counties with home agents gradually increased, and finally extended to every county in North Carolina.

From the beginning many phases of the home demonstration work made it necessary to work with groups. This in turn necessitated having local leaders. These local leaders began to be recognized during 1915 and 1916. During the war period the number of local leaders multiplied rapidly. The formal organization of clubs on a community basis came along at this same time to be federated a little later into the county and state federations as we now know them.

In the beginning Mrs. McKimmon was paid only for a few months each year. But by 1913, the number of counties in which work was underway necessitated her

year-round attention. She was not only State Leader, but she served as a specialist covering all technical lines. As we moved into the war period, and with the expansion of the work, she had to have assistance and thus began the development of the district plan of organization. During the war period, with emergency appropriations available and the all-out drive for increased production of food, technical specialists were added to the staff.

As has been related, the work with women was an outgrowth of the girls canning clubs and the two lines of activity have been closely related from the beginning. In the main, the agents more or less arbitrarily divided their time between work with women and work with girls. This was true to a greater degree with home agents than was the case with farm agents.

Home demonstration work has met every emergency and is now recognized as a definite part of our educational system.



Extension's home demonstration work has meant better farm living. Here a home demonstration club woman demonstrates floor finishing to fellow club members.

NEGRO DEMONSTRATION WORK

From the very beginning Negro farmers were just as much interested in improving their farming operations as white farmers. At first, they secured their information largely by observation of demonstrations with white farmers. Dr. Knapp, recognizing the need and opportunity to give special assistance to Negroes, arranged in 1906 with Tuskeegee Institute in Alabama and Hampton Institute in Virginia to initiate work with Negro agents serving Negro farmers. At that time both institutions were trying in a small way to furnish information to Negro farmers and fortunately at each of the insitutions there were well trained men to initiate the work.

At Tuskeegee Mr. T. M. Campbell, who had been working with Booker T. Washington, president of the institution, was selected as the first Negro agent. He was appointed in November 1906 and has served continuously until just recently when he reached retirement age.

At Hampton Institute Mr. J. B. Pierce was appointed just after Mr. Campbell began work. He continued to serve as an Extension agent until his death a few years

ago.

Both of these men were pioneers. They worked against the severest handicaps, but made good in an outstanding way. They had to overcome prejudice, not only between the races, but within their own race. In the early days it was very difficult to get appropriations from county commissioners for work with Negroes. For a long time the Negro work had to be supported almost entirely from State and Federal funds. However, the same principles that brought about successful work with the white people

applied with equal force to the Negroes. This simple demonstration conducted on the farm or in the home told its own story to all who observed, and as the years passed this method of teaching has come to be recognized as the outstanding technique in teaching people everywhere.

The employment of Negro agents developed rather slowly at first, but in a few years all the Southern states had Negro agents. Pierce and Campbell became State Leaders in their respective states and later were appointed District Leaders attached to the Washington office.

The first Negro County Agent in North Carolina was Neil Alexander Bailey. He was hired November 1, 1910 and worked in Guilford, Randolph and Rockingham counties until December 31, 1915. Bailey was a native of Chatham County and graduated at the age of 50 from A & T College with a B.S. degree.

Negro county workers, until the last few years, did not have the benefit of Negro specialists and had to get their technical information from white agents, from publications and white specialists.

The white specialists would attend conferences and meetings, but from the standpoint of getting out on the farms and aiding the Negro agent with his problems such a system was not entirely satisfactory. It should be mentioned that during those earlier days there were no adequately trained Negroes available for specialist work.

With the development of the Negro Land-Grant Colleges, that situation is rapidly being corrected and I am confident that more and more Negro specialists will be added to the staffs in all the Southern

states.

THE SMITH-LEVER ACT

Extension workers frequently mention the Smith-Lever Act as the charter of all Extension work and one may get the impression that it was conceived entirely by Congressman Lever of South Carolina and Senator Smith of Georgia. These two members of Congress deserve much credit, but the passage of the Act and its original conception was a result of much effort on the part of many individuals and organizations extending over a period of five years.

It may be recalled that the discussions in the previous articles in this series regarding demonstration work involved almost entirely direct Federal activity rather than federal, state and county cooperation as we know it today.

A number of the more progressive states began organizing the Extension Services as a division or department of the college

during the period from 1905 to 1909. Most of them were severely handicapped because of the lack of funds, but all recognized their obligations to furnish information to farmers and the Association of Land-Grant Colleges appointed a committee on Extension work about 1907. This committee, headed by President K. L. Butterfield of Massachusetts, made a report to the Association on November 19, 1908. There are some significant statements in the Butterfield Report as follows:

"It is the belief of your committee that the chief means of stimulating the proper recognition and adequate organization of Extension work in agriculture in our Land-Grant Colleges is a Federal appropriation for the work. We are quite aware of the objections that may be made to this proposition—that we already



A. F. Lever



Hoke Smith

have too much Federal supervision; that the Federal Treasury is inadequate to the demands made upon it; that it is becoming too easy to rush to the Federal Government whenever money is desired for any public purpose; and that the initiative should be left to the states. There are fundamental reasons, so it seems to your committee, why we have a right and indeed a duty to ask Congress to appropriate money for this purpose.

"The Extension work in the Land-Grant Colleges differentiates itself sharply from research work on the one hand and from instruction of resident students on the other. There is little chance of argument upon the proposition that the organization of resident instruction in agriculture through the Morrill and Nelson Acts and the organization of research and experimentation through the Hatch and Adams Acts is chiefly responsible for the progress in agricultural education that has been made during the past few decades. . . . We can think of no argument that is ever applied or does now apply to Federal appropriations for agricultural colleges and experiment stations that does not equally apply to Extension work which is organic and vital to the development of the functions of the institutions which we represent."

The Committee recommended that the Federal Government be asked for \$10,000 a year and President Butterfield and his committee worked on the idea during the next year, and at the meeting of the Association in Portland, Oregon, August 18, 1909 again recommended Federal appropriations for Extension work with some elaboration and expansion of the former report. The Committee again recommended \$10,000 a year from the National Treasury to each state without off-set. It further recommended that at any time after two years had elapsed that any state or territory that had accepted the appropriation and had actually organized Extension work, there would be available from the Federal Treasury an amount equal to that appropriated by the Legislature of the state concerned. It was provided, however, that the total additional funds for each state would not exceed an amount equal to one cent per capita of the total population of the state as shown in the last United States Census. There were some additional provisions in the recommendations, together with a statement of the advantages of the plan proposed.

This report was referred to the section on college work which approved it and finally the Association adopted the report as submitted.

The bill was drawn in line with the committee recommendations and was introduced by Congressman J. C. McLaughlin from Michigan on December 15, 1909.

DOLIVER BILL

On January 5, 1910 a similar bill was introduced in the Senate by Jonathan P. Doliver of Iowa and referred to the Committee on Agriculture and Forestry, of which he was chairman.

Meanwhile a strong movement had developed for vocational education in agriculture, trades and industries and home economics in secondary schools with Federal aid. The leading forces in this effort were the National Society for Industrial Education and the American Federation of Labor. It was also favored by a considerable number of the agricultural leaders in the Land-Grant Colleges.

Normal schools also were urging that they be given Federal aid, especially if they were to train teachers of vocational subjects. Senator Doliver introduced a bill carrying these general ideas on January 5, 1910, the same date on

which he had introduced the Extension Bill. This bill also went to the Committee on Agriculture and Forestry.

BILLS COMBINED

The Committee combined the two bills and made a favorable report on June 22, 1910. The report of the committee, however, dealt chiefly with vocational education, with only a single paragraph relating to Extension work. The combined bill received the support of the American Federation of Labor, The Farmers National Congress, the Normal Department of the National Education Association and some other groups. The Association of Land-Grant Colleges, at its meeting in 1910, held a long discussion regarding this bill. Many members were not favorable to Federal aid to secondary schools and there was a general feeling that the Association had not been fairly dealt with in putting the Extension items into this bill without its consent.

Finally, its executive committee was instructed to press the passage of the McLaughlin Extension bill rather than the combined Doliver bill. Senator Doliver died in the fall of 1910 and no further action was taken on the bill at that time.

Meanwhile demonstration work in the South and in the North gained increasing popularity and during the 62nd Congress a variety of bills was introduced granting Federal funds for such work. Congressman W. B. McKinley of Illinois introduced one of these bills which provided an appropriation equal to one mill (one-tenth of a cent) for each acre of farm land in the respective states for the fiscal year 1913, and an annual increase of this amount for nine years by one additional mill and thereafter 10 mills annually on the same basis.

The next meeting of the Land-Grant College Association discussed the various proposals at considerable length. The membership

of the Association was divided, but finally in substance the Association decided in favor of Federal aid for vocational education in public schools of secondary grade, but expressed its preference for the Extension bill. President Taft, in a speech at Kansas City endorsed Federal aid for Extension work.

In the meantime, control of the House passed to the Democratic Party and A. F. Lever of South Carolina, a member of the Committee on Agriculture, and chairman of the Committee on Education, introduced a bill granting Federal aid to the agricultural Extension work of the Land-Grant colleges. A little later the executive committee of the Land-Grant College Association, officers of the National Soil Fertility league, and representatives of the Department of Agriculture prepared a modified form of the Lever Bill. This was introduced in the Senate by Hoke Smith of Georgia on January 16, 1912 and the next day a similar bill was introduced in the House by Mr. Lever.

HEARINGS HELD

Hearings were held on these two bills and a number of witnesses representing various organizations appeared before the committees. In the House the chairman of the hearings stated that 16 bills were pending for Federal aid to Extension work.

The Lever Bill was changed somewhat and finally passed the House with amendments on August 23. In the Senate, the House bill was received on August 24 and referred to the Committee on Agriculture and Forestry. It was reported back to the Senate with an amendment on December 14, 1912.

In the meantime, Senator Page of Vermont introduced a bill carrying the idea of vocational education and on the floor offered his bill as a substitute for the Lever Bill. The Page Bill was finally passed and then the bill went to conference between the two houses and the 62nd Congress expired without accepting either bill.

DEMOCRATIC MAJORITY

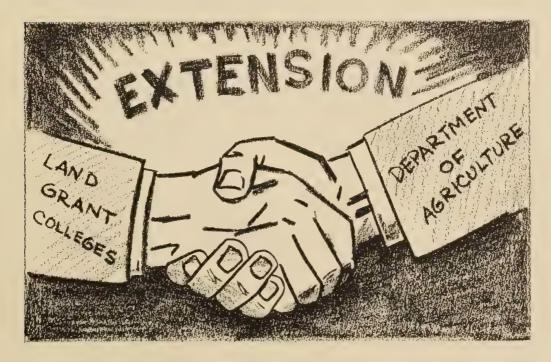
The election in 1912 gave the Democratic Party majority in both houses of Congress. In the Senate Hoke Smith was on the Committee of Agriculture and Forestry and was also chairman of the Committee on Education and Labor. In the House Mr. Lever became chairman of the Committee on Agriculture.

The Smith-Lever Extension Bill and the Page Bill on Vocational Education were re-introduced and referred to the Committees on Agriculture and Forestry. Senator Smith also introduced a bill to provide Federal funds for training vocational teachers at the state universities, colleges and normal schools, and a joint resolution to create a Commission "to consider the needs and report on a plan not later than December 1 next for national aid to vocational education."

The Commission was created on January 20, 1914. It had the effect

of practically postponing further consideration of the vocational bill, thus leaving the way open for the passage of the Smith-Lever Extension Bill. However, there were some fears that the passage of this bill might result in the discontinuance of demonstration work, not only in the South, but in the North. This finally led to a conference between the representatives of the agricultural colleges, the Secretary of Agriculture and Senator Smith and Rep. Lever. As a result, a new form of the Smith-Lever Extension Bill was prepared and introduced in both houses of Congress September 6, 1913. The new bill provided that there should be active cooperation between the colleges and the Department of Agriculture.

With consideration of the Vocational idea being postponed, the new Smith-Lever Bill met with only slight opposition. There was some discussion as to how the funds would be allocated to the States and also the question of how the Negro Land-Grant institutions should share in the funds. It was finally agreed that the allocation to the states would be on the basis



of their proportion of rural population and as far as Negro Colleges were concerned, it was left to the Legislature of each individual state to designate the Land-Grant institution which should get the benefits of the Act. Naturally under the circumstances in the Southern states, the white Land-Grant Colleges were designated and have administered the work since 1914.

SMITH-LEVER ACT

The Smith-Lever Act was specific, and yet very broad, in specifying the kind of work that was to be done, and also wrote in certain restrictions prohibiting the use of the funds for certain things. For the purpose of this discussion, only two paragraphs of the Act need to be considered. The first paragraph states the objective, while the second specifies how the work should be done. These two

paragraphs are as follows:

"That in order to aid in diffusing among the people of the United States useful and practical information on subjects related to agriculture and home economics and to encourage the application of the same, there may be inaugurated in connection with the college or colleges in each state now receiving or which may hereafter receive the benefits of the Land-Grant Act of 1862 and the Morrill College Endowment Act of 1890, Agricultural Extension Work which shall be carried on in cooperation with the United States Department of Agriculture.

"That the Cooperative Agricultural Extension Work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State Agricultural College or college receiving the benefits of this Act.

It had been an up-hill battle for some six years, but with the signing of the Act by President Wilson on May 8, 1914, the policy of Federal assistance for teaching, research and Extension in agriculture and home economics became

the national policy.

It may be recalled that in the development and passage of the Morrill Act in 1862, most of the opposition came from the Southern states where Federal domination was feared, and it took a shift in administration from the Democrats to the Republicans before the bill finally became a law. Fifty years later the South was strong for the Extension work while many of the northern representatives favored the vocational type of activity. Again, it took a shift in political parties before the Act was finally passed.

There were many problems to be worked out and some of these are discussed in the next chapter.

FEDERAL-STATE COOPERATION

The Smith-Lever Act established a broad national system of popular and practical education in agriculture and home economics and stated that this work would be cooperative between the United States Department of Agriculture and the state Land-Grant Colleges. It also contemplated the extension of this cooperation to take in counties, communities and individuals.

This was far-reaching legislation but there were many administrative problems and relationships that needed to be worked out through conferences, trial and error, and a give-and-take attitude on the part of many organizations and individuals.

When the act was passed work of the kind contemplated was being conducted by several agencies, the United States Department of Agriculture, state departments of agriculture, state agricultural colleges, and county organizations with or without public funds.

COOPERATIVE EFFORT

The Secretary of Agriculture was responsible for the administration of the act as far as the expenditure of federal and state off-set funds were concerned. On the other hand, it was contemplated that the initiation of the various lines of work and the routine administration of operations would be the responsibility of the State. Each state was to make an annual report of its activities including details of expenditures and likewise was to submit programs to the Secretary of Agriculture of the work to be done from year to year. It was also provided that the states must designate an administrative officer, but such officer had to be approved by the Secretary of Agriculture.

These and other requirements necessitated reorganization of the Department of Agriculture and in most of the states the colleges found it necessary to either reorganize their Extension administration or establish such a division where they did not have one at that time.

One of the main problems was that of handling the large force of county agents and supervisors employed under the Farmers Cooperative Demonstration Work in the South and the farm management work in the North. Until the passage of the Smith-Lever Act, all of these workers reported direct to Washington and now they became members of the staff of the state agricultural colleges. In most instances all of these workers were kept by the colleges and in the course of time the transition was made without serious difficulty.

Many conferences were held by representatives of the Land-Grant Colleges and the Department of Agriculture. It seemed desirable, in fact almost necessary, to develop a uniform memorandum of understanding that would be applicable in all of the states. Finally such an agreement was drawn and agreed upon and it was so basic to the administration of the Extension work that it is given herewith:

MEMORANDUM OF UNDERSTAND-ING BETWEEN THE (NORTH CAROLINA) STATE AGRICULTURAL COLLEGE AND THE UNITED STATES DEPARTMENT OF AGRICULTURE REGARDING EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS IN THE STATE OF (NORTH CAROLINA).

LINA).

Whereas, (North Carolina) State Agricultural College has, or may hereafter have, under its control Federal and State funds for extension work in agriculture and home economics, which are and may be supplemented by funds contributed for similar purposes by counties and other organizations and by individuals within said State, and the United States Department of Agriculture has, or may hereafter have, funds appropriated directly to it by Congress which can be spent for demonstration and other forms of extension work in the State of (North Carolina).

in the State of (North Carolina).

Therefore, with a view to securing economy and efficiency in the conduct of extension work in the state of (North Carolina), the president of the (North Carolina) State Agricultural College, acting subject to the approval of the board

of trustees of said college, and the Secretary of Agriculture of the United States, hereby make the following memorandum of understanding with reference to co-operative relations between said college and the United States Department of Agriculture for the organization and conduct of extension work in agriculture and home economics in the State of (North Carolina):

1. The North Carolina State Agricul-

tural College agrees:

(a) To organize and maintain a definite and distinct administrative division for the management and conduct of extension work in agriculture and home economics, with a responsible leader selected by the college and satisfactory to the Department of Agriculture;

the Department of Agriculture;

(b) To administer through such extension division thus organized any and all funds it has or may hereafter receive for such work from appropriations made by Congress or the State legislature, by allotment from its board of trustees, or from any other source;

(c) To cooperate with the United States Department of Agriculture in all

States Department of Agriculture in all extension work in agriculture and home economics which said department is or shall be authorized by Congress to conduct in the State of North Carolina.

2. The United States Department of

Agriculture agrees:
(a) To establish and maintain in the Department of Agriculture a States Relations Service, which shall represent the department on the general supervision of all cooperative extension work in agriculture and home economics in which the department shall participate in the State of (North Carolina) and shall have charge of the department's business connected with the administration of all funds promided to the States under the Smith Level vided to the States under the Smith-Lever

To conduct in cooperation with (North Carolina) State Agricultural College all demonstrations and other forms of extension work in agriculture and home economics which the department is authorized by Congress to conduct in the State

of North Carolina.

3. The North Carolina State Agricultural College and the United States Department of Agriculture mutually agree:

That, subject to the approval of the president of North Carolina State Agricultural College and the Secretary of Agriculture, or their duly appointed representatives, the cooperative extension work in agriculture and home economics in the State of North Carolina involving the use of direct Congressional appropriations to the Department of Agriculture shall be planned under the joint supervision of the director of extension work of (North Caro-lina) State Agricultural College and the agriculturist in charge of demonstration work of the United States Department of Agriculture in the (South) and that the approved plans for such cooperative extension work in the State of North Carolina shall be executed through the extension division of North Carolina State Agriculture. tural College in accordance with the terms of the individual project agreements;

(b) That all agents appointed for cooperative extension work in agriculture and home economics in the State of North Carolina under this memorandum and

subsequent project agreements, involving the use of direct Congressional appropriations to the Department of Agriculture, shall be joint representatives of the North Carolina State Agricultural College and the United States Department of Agricultu ture, unless otherwise expressly provided in the project agreements; and the cooperation shall be plainly set forth in all publications or other printed matter issued and used in connection with said cooperative extension work by either North Carolina State Agricultural College and the United States Department of Agriculture;

(c) That the plans for the use of the Smith-Lever fund, except so far as this fund is employed in cooperative projects involving the use of department funds, shall be made by the extension division of the North Carolina State Agricultural College but shall be subject to the approval of the Secretary of Agriculture in accordance with the terms of the Smith-Lever Act, and when so approved shall be executed by the extension division of said North Carolina State Agricultural College;

(d) That the headquarters of the State organization contemplated in this memorandum shall be at North Carolina State Agricultural College.

4. This memorandum shall take effect when it is approved by the president of North Carolina State Agricultural College and the Secretary of Agriculture of the United States and shall remain in force until it is expressly abrogated in writing by either one of the signers or his successor in office. sor in office.

This memorandum was signed by all of the states, with the exception of California and Arizona. Later Arizona did accept it but Illinois later withdrew. The objection on the part of Illinois and California was based on the ground that it interfered with the authority of the trustees of these institutions respecting the appointment and duties of Extension officers. The general principles of the memorandum, however, were agreed to in all of the states and this document has served a very useful purpose for nearly 40 years.

SEPARATE UNIT

It will be noted that the colleges agreed to establish a distinctive administrative unit through which all Extension work would be handled, and likewise, the Department of Agriculture at Washington agreed that all work of an Extension nature done by the Department in the several states would be channeled through the college organization.

For 20 years, this arrangement worked without any serious difficulty. During the depression and the advent of the New Deal Administration, the federal government established a number of new agencies dealing with agricultural matters. Agencies such as the AAA, the Soil Conservation Service, and others were generally termed action agencies rather than educational. In most of the states the Extension Services aided in the promotion of these agencies and with some actually handled the administrative work for several years.

Gradually, however, as usually happens with a new organization, the field of activity was broadened from a straight action agency to include educational work as well, and occasionally it appeared that officials of an action agency wished to do the whole job with a direct administrative line from Washington to the individual farmer. This did not meet with the approval of many Land-Grant institutions. I recall one conference in Birmingham, Ala. at which time a federal representative outlined a plan for by-passing the colleges entirely. The president of the University of Kentucky, who was present, reacted with vigor and stated, "If that is the policy of this Administration, it will shake the very foundation of this government."

Over the years relationships have improved very much, but the fundamental issue is not yet solved and will be the subject of much debate and legislation in the present Con-

gress.

Three years after the passage of the Smith-Lever Act, the United States entered the First World War. Fortunately, the Extension organizations in all the states had been developed and were ready to handle their part in helping to-win the war. Some of the activities have been discussed in previous chapters and need not be repeated here. Emergency funds were allocated and the personnel was increased materially.

Following the war, emergency funds were withdrawn and in practically all states there was a reduction in the number of workers. In general, however, farmers and farm women had learned of the help they could get through the Extension organization, and after two or three years state and local support was increased and the work expanded into most of the counties. Also more and more college graduates in agriculture and home economics became available and gradually replaced the older agents who had not had the benefit of this technical education.

In time, federal appropriations were multiplied several times and likewise state and county funds permitted an expansion of the work to meet old and new problems.

Probably the earlier agents would in most instances be a complete failure under present conditions. In their day, they blazed a new trail, and all honor is due them without detracting in any way from the credit due the present personnel. It may be doubted as to whether the present trained workers would have accomplished any more if they had to start from scratch and build new foundations and a new program from the grass roots.

All Extension workers should feel proud of their organization. Many mistakes have been made, but the accomplishments have over-shadowed the short-comings as demonstrated by the fact that Boards of County Commissioners in North Carolina annually appropriate more than \$1,000,000 for the support of Extension work. If the results did not meet with general approval on the part of the public, it would soon reflect itself in the withdrawal of county financial support.

THE FIRST 50 YEARS . . .

This series of articles was originally written for Extension Farm-News (Sept. 1952-June 1953) as a part of the commemoration of the 50th anniversary of farm demonstration work and primarily for North Carolina Extension workers. It is not intended to give a complete history of the development of Agricultural Extension work.

Its purpose is to present general background with some of the trials and tribulations that always go with new ideas; and with the fervent hope that somewhere along the line of this brief history Extension workers may get ideas, encouragement and faith that will result in increased efficiency.

Extension work is a philosophy; with many it is almost a religion. And the satisfaction that one gets in seeing the improvement in the standard of living of the people served is the most satisfying remuneration that anyone can experience.

I O Achaub